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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,355	12/19/2001	Toyoaki Kitano	1163-0380P	7839

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
RICHER, AARON M	

ART UNIT	PAPER NUMBER
2676	

DATE MAILED: 10/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/018,355	KITANO ET AL.	
	Examiner	Art Unit	
	Aaron M Richer	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5 and 14* is/are allowed.

6)☒ Claim(s) *1-4,6-12 and 15-19* is/are rejected.

7)☒ Claim(s) *13 and 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 15 have been considered but are moot in view of the new ground(s) of rejection.

2. As to claim 5, the examiner agrees that the limitation added to the claim, "size being determined based on the position of said operating means", is not featured or suggested by Mok, Batio, Suga, or any other reference along with the other limitations claim 5. Mok discloses displaying means, operating means, and supporting means, operable at the positions recited in claim 5. Batio discloses displaying only on display surfaces not overlapping with operating means. Suga discloses a tiled display that changes display scale based on a size available for displaying, but does not disclose that the size is based upon the position of operating means. Since Suga does not disclose operating means with a changeable position, it would not have been obvious to one skilled in the art to combine the teachings of Suga to Batio in such a way as to scale a display and base available display size *on the position of operating means*.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-3, 7-9, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok (U.S. Patent 6,008,986) in view of Evans (U.S. Patent 5,534,759).

5. As to claims 1 and 15, claim 1 recites "A display apparatus comprising: a mounted displaying means for displaying visual information". Mok discloses "a display... placed in the upper housing portion... of the computer housing" (col. 2, lines 50-52). Figures 1-5 of Mok show a display panel (element 24) mounted on a computer housing. Claim 1 further recites "an operating means for outputting a predetermined signal to control an operation of a device". Mok further discloses operating means, in the form of a keyboard: "A keyboard is placed on top of the lower portion of the computer housing" (col. 2, lines 53-54). Finally, Claim 1 recites "a supporting means for supporting said operating means, said supporting means being provided near a peripheral portion of said displaying means, said operating means being rotatable on said supporting means". Mok discloses supporting means for supporting the operating means, in the form of a mechanical link, provided near a peripheral portion of the display (see fig. 3; col. 2, lines 53-67; col. 3, lines 1-11). This disclosure also shows that the operating means is pivotable, or rotatable, on the supporting means with respect to the displaying means.

Mok does not disclose a mounted displaying means being mounted in a fixed position. Evans, however, discloses display means (fig. 3, element 54) being mounted on a front console (col. 4, lines 25-35). Since the display means is connected through the console to a data acquisition system and a power connection through the ignition switch (col. 4, lines 25-35), it is inherent that the display is fixed, and not easily removable. Otherwise the power and data systems would need to be rewired every time the display means was removed. The display means is only removed after testing

or diagnostic servicing has completed (col. 4, lines 50-60). The motivation for mounting a display in a fixed position is to read data from a car's data acquisition system and power it through a car's ignition system (col. 4, lines 25-35). It would have been obvious to one skilled in the art to modify Mok to mount a display in a fixed position in order to display car-related data and power the display from the car's ignition switch as taught by Evans.

6. As to claims 2 and 16, Claim 2 recites "The display apparatus as claimed in claim 1, wherein said operating means is set, at a time of non-operation, to a first position in which an operating surface faces a display surface of said displaying means". Mok discloses that "When the upper portion or display panel...is swung closed or downwardly, an opposite movement of the mechanism takes place, and the keyboard...moves back into the rest position" (col. 3, lines 58-62). It is clearly shown by Figure 6 of Mok that the display means and the operating means (keyboard) are facing each other in this "rest position". The "rest position" disclosed by Mok is equivalent to the "time of non-operation" recited by Claim 2.

Claim 2 further recites that the operating means is "set, at a time of operation, to a second position in which, rotating said first position, use of said operating surface to initiate the operation is permitted". Mok discloses that "When the laptop computer 50 is swung open, as shown in FIGS. 4 and 5, the lower bar 56 is pulled towards the rear of the computer 50. This movement of the lower bar 56 rotates the gears 62 counter-clockwise and forces the upper bar 56 to move towards the front of the computer. As a result, the keyboard 26 is slid outwardly towards the front and concurrently tilted

upwardly" (col. 3, lines 51-58). This outward and upward keyboard movement, after the pivoting or rotation of position, is done so that the user can use the keyboard for operation, as in Claim 2.

7. As to claims 3 and 17, Claim 3 recites "The display apparatus as claimed in claim 2, wherein said supporting means comprises an arm portion, said arm portion being housed when said operating means is set to said first position". Mok discloses that "said lower bar having an extension arm journaled to said display panel [that] displaces said lower bar to tilt said keyboard angularly upwardly while concurrently causing said lower bar to rotate said gears and sliding the upper bar and the therewith attached keyboard forwardly and outwardly relative to the housing" (col. 4, lines 40-54). Clearly this describes an arm portion that projects the operating means (keyboard) forward from the displaying means when used.

Claim 3 further recites "[the arm portion] being projected forward when said operating means is set to said second position so as to separate said displaying means from said operating means". Mok discloses that "closing of said display panel causes said lower bar to move forwardly so as to lower the keyboard into the housing" (col. 4, lines 55-61). This describes an arm portion moving back into the housing with the operating means (keyboard) when the operating means are not used.

8. Claim 7 recites "The display apparatus as claimed in claim 2, wherein the second position is a position in which the operating surface of said operating means forms an obtuse angle relative to the display surface of said displaying means." Figures 2 and 5

of Mok clearly show the display surface (element 22) at an obtuse angle with the operating means (keyboard, element 26).

9. Claim 8 recites "The display apparatus as claimed in claim 1, further comprising an angle adjusting means for adjusting an angle to be formed between the operating surface of said operating means and the display surface of said displaying means." Mok discloses that the display panel is "pivotable between a folded down closed position and upwardly raised open positions" (col. 5, lines 31-33). The display panel is pivotable with respect to the operating panel and therefore an angle adjustment takes place every time the display panel is pivoted.

10. As to claim 9, Mok in view of Evans discloses the display apparatus as claimed in claim 1. Evans further discloses a display apparatus installed in an automobile (fig. 3).

11. Claims 4, 6, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok in view of Evans, and further in view of Batio (U.S. Patent 5,949,643).

12. As to claims 4 and 18, Claim 4 recites "The display apparatus as claimed in claim 2, wherein, when said operating means is set to said first position, said displaying means makes a display only on a display surface which is free from overlapping with said operating means." Mok in view of Evans teaches a display apparatus as claimed in claim 2. Neither Mok nor Evans teaches displaying means that makes a display only on a display surface which is free from overlapping. Batio, however, discloses "a dual LCD display or split screen 101, with each section being pivotally attached to a keyboard half-section. Each half of the split-screen is independently, pivotally mounted so that each may be moved separately" (col. 8, lines 14-24). Batio further discloses that the

screens can be used simultaneously for different purposes: "one half of the split-screen 101 may be used for normal computer functions, such as word processing, by means of the first microprocessor, whereas the second half of the split screen 101 may be used for playing video games via the dedicated game-microprocessor" (col. 8, lines 50-56). Batio discloses many advantages of a split display, such as for two-player game play (col. 3, lines 61-67; col. 4, lines 1-4) and for use as a translation device (col. 9, lines 15-23). Batio also discloses that the split screen allows the device to be "compactly stored" (col. 2, lines 5-11). Being pivotally mounted, these screens can be folded down onto the operating means (keyboard half-section). It is also shown that the two screens can be used independently of each other. If one screen is in use (free from overlapping means), and the other is folded-down and not in use (not free from overlapping means), only the display surface that is free from overlapping means will be used, as in Claim 4. It would have been obvious to one skilled in the art to modify Mok in view of Evans to include a split display, in which only the part of the display free from overlapping means would be used, in order to make the device more useful as taught by Batio.

13. Claim 6 recites "The display apparatus as claimed in claim 2, wherein said displaying means displays the visual information in a plurality of screens, and wherein, in case it is to make a divided display when said operating means is set to said first position, the divided display is made only on the display surface free from overlapping with said operating means, and wherein, in case it is to make a divided display when said operating means is set to said second position, the divided display is made on all of the display surface." Mok in view of Evans teaches a display apparatus as claimed in

claim 2. Neither Mok nor Evans teaches a divided display when operating means are set to first position or second position. Batio, however, discloses a divided display on the entire display surface: "one half of the split-screen 101 may be used for normal computer functions, such as word processing, by means of the first microprocessor, whereas the second half of the split screen 101 may be used for playing video games via the dedicated game-microprocessor" (col. 8, lines 50-56). This describes a divided display on all of the display surface. Also, since Batio states that the screens can be used independently of one another (see rejection of Claim 4), and functions such as word processing and video games use divided displays to show information, toolbars, etc., it is implied that Batio's invention would display a divided display on only one screen if the other screen was not free from overlapping means. In this way, Batio is describing a divided display made only on the display surface free from overlapping with operating means. It would have been obvious to modify Mok in view of Evans to include a divided display available on part or all of a screen, in order to allow users to perform multiple tasks at one time as taught by Batio.

14. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mok in view of Evans and Batio and further in view of Suga (U.S. Patent 4,800,376).

None of Mok, Evans, or Batio discloses an invention wherein said displaying means changes a displaying scale depending on a size of the display surface available for displaying. Suga, however, discloses a tiled display system in which an encoder enlarges a display corresponding to the size of the total display, in this case the number of decoders for displays (col. 2, lines 47-57). The motivation for this is that more

screens comprise a larger display that can be seen by more people (col. 1, lines 30-35). It would have been obvious to one skilled in the art to modify Mok, Evans, and Batio to change a display scale depending on the size of a display surface in order to make a display larger to attract the attention of more people as taught by Suga.

15. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok in view of Ames (U.S. Patent 4,787,040).

16. As to claim 10, Mok in view of Evans discloses the display apparatus as claimed in claim 1. Mok in view of Evans does not disclose an invention wherein said operating means permits a user to operate one or more devices, the predetermined signal being output to the device being operated by the user. Ames, however, discloses an operating means that operates many devices, such as climate control and a CD player (fig. 3). The motivation for this is to provide a single interface for many computerized automobile functions, such as an electronic compass display and appointment calendar (col. 2, lines 20-43). It would have been obvious to one skilled in the art to modify Mok in view of Evans to operate one or more devices in order to provide a single interface for many functions as taught by Ames.

17. As to claim 11, Mok in view of Evans and further in view of Ames discloses the display apparatus as claimed in claim 10. Ames further discloses an invention wherein the displaying means is used to display visual information relating to the user's operation of the device via the operating means (fig. 3; col. 5, lines 33-62).

18. As to claim 12, Mok in view of Evans and further in view of Ames discloses the display apparatus as claimed in claim 11. Ames further discloses an invention wherein

the one or more devices include at least one of an audio device, an image reproducing device, and a navigation device (fig. 3; col. 5, lines 33-62).

Conclusion

19. Claims 5 and 14 are allowed.

20. Claims 13 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Richer whose telephone number is (703) 305-5825. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (703) 308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMR

10/20/04

Matthew C. Bella

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600